



Calculating Manure Nitrogen Credits for Prior Years
(Credits must be calculated for the 2 previous years)

	<u>Last Year</u>	<u>2 Years Ago</u>
1. <u>Percent (%) Organic Nitrogen</u>		
____ %N - ____ %NH ₄ -N = %Organic N (Last year)	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
____ %N - ____ %NH ₄ -N = %Organic N (2 years ago)	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
- Values are from a manure analysis. - If no analyses were performed, use average analyses. (See "Manure Summary Sheet.")		
2. <u>Mineralization Rate</u>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
- Refer to the <i>Infocard</i> for the mineralization rate for the appropriate animal species year (last year or 2 years ago).		
3. <u>Conversion Factor</u>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
- Conversion factor is 20 if the units are lbs./ton. - Conversion factor is 0.0837 if the units are lbs./1000 gallons.		
4. <u>Application Rate</u>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
- This is the amount of manure applied in each year. - Enter the rate as tons/acre or gallons/acre.		
5. <u>Nitrogen Credit (lbs./acre)</u>	<input style="width: 50px; height: 30px;" type="text"/>	<input style="width: 50px; height: 30px;" type="text"/>
- Multiply #1 X #2 X #3 X #4.		

% Organic N X Mineralization Rate X Conversion Factor X Application Rate = N Credit

Calculating Net Nitrogen Recommendation

6. <u>Gross Crop N Recommendation (lbs./acre)</u>	<input style="width: 50px; height: 30px;" type="text"/>
- See <i>SFM-1</i> for crop nutrient recommendations.	
7. <u>N Credits (lbs./acre)</u>	
A. Manure credit from last year (See #5.)	_____
B. Manure credit from 2 years ago (See #5.)	_____
C. Legume credit (See <i>Infocard</i> .)	_____
8. <u>Total N Credit (lbs./acre)</u>	<input style="width: 50px; height: 30px;" type="text"/>
- Add 7A + 7B + 7C.	
9. <u>Net Crop N Recommendation (lbs./acre)</u>	<input style="width: 50px; height: 30px;" type="text"/>
- Subtract total N credit (#8) from gross crop N recommendation (#6).	

Gross Crop N Recommendation - Total N Credit = Net Crop N Recommendation

Calculating an N-Based Manure Application Rate

10. Manure Application Rate

- Expressed as tons/acre or gallons/acre.
- Divide the crop net nitrogen recommendation (#9) by PAN in manure.

11. Available Nutrients in Manure

- Expressed as lbs./ton or lbs./gallon.
- For N, enter PAN.
- If manure is solid or semisolid, multiply %P₂O₅ and %K₂O from manure analysis by 20 and enter result.
- If manure is liquid, multiply %P₂O₅ and %K₂O from manure analysis by 0.0837 and enter result.

N

P₂O₅

K₂O

12. Nutrients Supplied by Manure (lbs./acre)

- Multiply available nutrients in manure (#11) by the manure application rate (#10).

Calculating Additional Fertilizer Requirements When Using Manure

13. Nutrient Recommendations for Crops (lbs./acre)

- Enter the net N recommendation from #9.
- Consult **SFM-1** for P₂O₅ and K₂O recommendations.

N

P₂O₅

K₂O

14. Nutrient Supplied by Manure (lbs./acre)

- Enter the amounts from #12.

15. Additional Fertilizer Requirements After Manure (lbs./acre)

- Subtract the nutrients supplied by manure (#14) from the nutrient recommendations for crops (#13).
- If the number is less than zero, enter zero.